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ABSTRACT

This study investigated two models of organizational and individual interaction to discover which model better describes the relationship between the degree of bureaucracy in school organizations and the work motivation of teachers within those institutions. Argyris (1973) posited that bureaucracy has a negative relationship to employee work motivation, while Getzels and Guba (1957) suggested that organizational expectations and individual needs are separate and independent factors that interact in a social system. Employee motivation data were gathered from a sample of 297 teachers in nine school districts, using a modified Work Components Study. Data gathered from central office staff and school district records were used to calculate the degree of bureaucracy in each district. Analysis of the data revealed no significant relationship between the degree of school district bureaucracy and teachers' scores on intrinsic motivational factors, risk propensity factors, and extrinsic motivational factors. (Author/JG)

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# PUBLIC-SCHOOL DISTRICTS' BUREAUCRACY LEVEL AND TEACHERS' WORK MOTIVATION ATTITUDES

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PUBLIC-SCHOOL DISTRICTS' BUREAUCRACY LEVEL AND TEACHERS' WORK MOTIVATION ATTITUDES

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Two positions regarding the relationships between organizational structure and employee work motivation or behavior served as conceptual guides for developing the investigation. Chris Argyris (1973) attempted to identify and to explain some organizational facets that seem to have more influence on employee work behavior and attitudes. Argyris developed a model of motivation along a continuum with the low end called "infant" and the high end called "adult." Infant consists of being dependent and submissive and having few abilities while adult consists of being relatively independent with control over the immediate world. With this model, Argyris studied the individual in organizations. He concluded that certain aspects of the organization, such as hierarchy of authority and rules and regulations, influence the individual to be motivated either at the infant level or the adult level. Argyris posited that bureaucracy has a negative relationship to employee work motivation. According to Argyris, high organizational structure frustrates the self-actualization process of attaining adult motivation.

Getzels and Guba (1957) presented a different relationship between bureaucracy and personality. They developed a model that separates the expectations of an organization or what they termed the "nomothetic dimension" and the needs of the individual or the "idiographic dimension." The model suggests that these dimensions are separate, are independent,

and interact to elicit observed behavior of the individual in a social system. The institution expects the individual to fill a certain role while he has specific personal needs to satisfy. Getzels and Guba stated that both needs and expectations may be thought of as guides for behavior with one derived from personal propensities and the other derived from institutional requirements. Therefore, social behavior may be conceived as ultimately derived from the interaction between the dimensions. Consequently, this interaction of organization expectations and individuals' needs separately and interactively influences employees' work behavior.

Based on the differing positions of Argyris and Getzels and Guba, this study was concerned with which model best describes the relationship between the degree of bureaucracy in school organizations and the work motivation of teachers within those institutions. Few studies have attempted to relate these variables in the educational setting. Also, there are pratical problems associated with the bureaucratic structure, which does indeed affect the work motivation of employees. For example, if bureaucratization has some influence on how employees are motivated, the manipulation of the structure would have implications for improving organizational effectiveness and worker satisfaction. The specific question that guided this investigation was the following: Do the motivational traits of employees differ with the varying degrees of bureaucracy as suggested by Argyris, or are they independent as suggested by Getzels and Guba?

## Related Literature, Rationale, and Hypothesis

Selected studies in educational settings dealing with the relationship between bureaucracy or organizational structure and employee personality

traits, employee satisfaction, and employee motivation will be reviewed briefly. For example, Carpenter (1971) found that a relationship exists between the formal structural types of school organizations and the perceived job satisfaction of classroom teachers. He reported less satisfaction as the height or the tallness of the organization increased. Tallness means the number of hierarchical levels. Flat organizational structures tended to have a higher level of job satisfaction in its employees than did tall structural types.

In a second study dealing with the hierarchy, Hoy and Williams (1971) found no relationship between hierarchical independence and subordinate loyalty. This finding is contrary to Blau and Scott's (1962) finding that indicated subordinates were more loyal to a superordinate who had less loyalty toward his superordinate than to a superordinate who had more loyalty toward his superordinate. The earlier study indicated a relationship between employee loyalty and the structure of the organization. The Blau and Scott study indicated effectiveness of the hierarchy in the bureaucracy does not demand a certain chain loyalty. Hoy and Williams found no differences.

In a study dealing with organizational size and teaching styles, Admas, Kimble and Marlin (1970) found size had little effect. The researchers indicated that teacher satisfaction and happiness may be influenced by factors other than the opportunity to exercise their teaching autonomy. An alternative explanation could be that satisfaction may be influenced by other variations in organizational structure.

Odetola, Erickson, Bryan and Walker (1972) in an investigation of organizational structure and student alienation, contrary to their hypothesis, found that students in traditional-type classroom settings are less alienated than students in the more modern, team-teaching

classroom settings. A possible explanation of this could be the traditional classroom is structured more like a bureaucracy and under the definition is the most stable form of organizational structure. In this atmosphere Odetola found students most comfortable.

Robert J. Coughlan (1971) examined the ways in which teachers' work values affect job satisfaction within relatively closed- and open-school organizational systems. He proposed that work values would mediate differentially between the type of organizational system and the level of job satisfaction, depending upon whether one's dominant values coincided or conflicted with those of the formal organization. The overall findings failed to support the above proposal; however, the external system of the closed organization tends to block the attempt of members to gratify belonging, self and other esteem needs as expressed in the opportunities for widespread interactions, job autonomy, and upward influence. This tends to conceal any differences in thinking and feeling about colleague relations among members with disparate work values in the group's internal system by aggravating differences in thinking and feeling between members of the external and internal systems about the system administration, instructional program, financial incentives, and professional autonomy. The external system of the open organization tends to facilitate the attempts of members to gratify belonging, self and other esteem needs as expressed in opportunities for widespread interactions, job autonomy, and upward influence. This tends to reveal any differences in thinking and feeling about colleague relations among members with disparate work values in the group's internal system by improving differences in thinking and feeling between members of the external and internal systems about the system administration, instructional program, financial incentives, and professional autonomy.

George and Bishop (1971) investigated the relationship between four properties of organizational structure (formalization, centralization, complexity, professional latitude) and personality characteristics of teachers. The authors reported that in a smaller, less bureaucratic, innovative district, teachers exhibit low anxiety and perceive low organizational structure. They are more dependent, conservative, and trusting people who exhibit inauthentic behavior in their organizational roles. In the larger, traditional, more bureaucratic district the teachers perceive high organizational structures, are more independent, and are brighter. They also tend to reveal a higher degree of organizational anxiety.

The findings of Moeller and Charters (1966) indicate that teachers connected with a highly bureaucratic organization have a high sense of power. In comparing these people with a group in an organization low in bureaucratic structure, they found that the people in the highly bureaucratic organizations continued to have more sense of power than the group in the organization low in bureaucratic structure. However, with lengths of tenure the two groups' sense of power did not diverge. Hence, the researchers concluded that highly bureaucratic organizations tend to seek and employ people with a high sense of power.

Bridges' study (1965) suggested that the proportions of role and personality factors determining behavior may vary with the amount of experience one has in the bureaucratic role. The study was concerned with the behavioral modifications of the particular personality type in one public educational bureaucracy. He stated that sustained role enactment in a bureaucracy should lead to a reduction in behavioral variation among organizational members occupying the same role. The findings

showed that the differences between personal qualities and performance of open- and closed-minded school-building principals diminished with increased experience. This fact suggested that the school principal's behavior is affected, perhaps molded, by his bureaucratic role.

A finding by Miskel (1973) indicated that educators in a particular school district differed from educators in another district in what factors motivated them to work. Individuals did not necessarily differ from individuals; but the district, as a whole, differed from the other district in their employees' work motivation. These differences could be caused by many things, including the size of the community or the hiring practices of administrators in that district.

The Getzels and Guba (1957) model of employee versus institutional needs served as a basic guide in the development of this study. The authors wrote,

> To understand the behavior of specific role incumbents in an institution, we must know both the role expectations and the need-dispositions. Indeed, needs and expectations may be both thought of as motives for behavior, the one deriving from personal propensities, the other from institutional requirements. What we call social behavior may be conceived as ultimately deriving from interaction between the two sets of motives (p. 428).

Argyris (1973) stated that the higher an individual is in the hierarchy of an organization, the fewer controls are encountered; hence, the individual operates in a less bureaucratic structure. With this low bureaucracy and low control situation, the employee is happier, feels freer, and is motivated by intrinsic variables. The opposite is found when an individual is at the low end of the hierarchy. There may be many controls and a high degree of bureaucracy; hence, the individual does not feel free, is not so happy, and is motivated by extrinsic variables. This fact indicates that bureaucracy has an effect on employee motivation.

Argyris claims that low bureaucracy is good and that high bureaucracy is bad on employee motivation.

In summary, Coughlan's (1971) findings support Argyris' position while the findings of Carpenter (1971), Odetola, Erickson, Bryan, and Walker (1972), Moller and Charters (1966) do not support the proposition that bureaucracy has a negative relationship to employee work motivation. In comparison, Bridges' (1965) findings support Getzels and Guba's position of a separate but interactive relationship between the levels of bureaucracy and individual motivation. However, the findings of George and Bishop (1971) are mixed in that partial support is given to both conceptualizations. In addition, studies by Hoy and Williams (1971), Adams, Kimball, and Marlin (1970), and Miskel (1973) suggest a potential relationship between organizational structure and personality. Although the support is mixed, the following hypothesis was developed to guide this investigation.

Teachers in school districts with lower levels of bureaucracy will score significantly (1) higher on intrinsic motivational factors, (2) higher on risk propensity motivational factors, and (3) lower on extrinsic motivational factors than teachers in school districts with higher levels of bureaucracy.

## Methods

The instrument used to measure employee work motivation attitudes was a modified Work Components Study (WCS) originally developed by Borgatta (1967). Miskel and Heller (1973) modified the Borgatta instrument to suit the educational organization. The Educational Work Components Study (EWCS) merges Hertzberg's two-factor theory with Blum's findings

regarding security organization among workers. Essentially, the items ask the respondents to judge the desirability of jobs with varying amounts of intrinsic factors, extrinsic factors, and intrinsic combined risk factors.

The EWCS was composed of 56 Likert-type items representing six factors. A description of the six factors, their relationship to the two-factor theory, and the highest orthogonally loaded item follow.

1. Potential for personal challenge and development (PPCD, 8 items). This factor contains items to measure the desire for creativity and responsibility in the job. The highest factor loading was .63 for the item, "I would have a chance to further my formal education." This factor measures intrinsic motivation.

2. Competitiveness desirability and reward of success (CDRS, 7 items). These items measure whether an individual seeks job situations where the salary is determined by merit and the competition is keen. The item, "Salary increases would be a matter of how much effort you put in" had the highest loading of .64. This factor measures intrinsic motivation and risk.

3. Tolerance for work pressure (TWP, 9 items). This factor contains items measuring attitudes toward situations where the work load might be excessive. The highest factor loading was .65 for the item, "The work might build up pressures on me." This factor measures intrinsic motivation and risk.

4. Conservative security (CS, 11 items). These items measure the individual's desire for security with well-defined promotion guidelines and job routines. The item, "The work would be routine but not hard to do" had the highest factor loading of .75. This factor measures extrinsic motivation.

5. Willingness to seek reward in spite of uncertainty versus avoidance of uncertainty (WSR, 10 items). This factor contains items measuring the individual's willingness to do interesting work even though it might be a

temporary job. The highest loading of .75 was found for the item, "There is little permanency of positions." This factor measures intrinsic motivation and risk.

6. Surround concern (SC, 11 items). These items measure the person's concern with the hygenic aspects of the job. The item, "The ventilation is modern" had the highest factor loading of .73. This factor measures extrinsic motivation.

The reliability of the original seven-factor, 66-item WCS has had a range from .65 to .85 (Borgatta, Ford and Bohrnstedt, 1968 and Summers, Burke, Satiel, and Clark, 1971). The reliability of the six-factor, 56-item Educational Work Components Study (EWCS) questionnaire compares very favorably with the results of Borgatta (1967) and Summers, et al (1971) with a range of .73 to .83.

The method of measuring and analyzing the degree of bureaucratic structure in school systems was developed by Meyers (1972). Thirteen independent variables that measured the five characteristics of bureaucracy were identified. The Meyers instrument was adapted as an interview schedule for use in the present study.

Variable one was specialization of functions at the production level. Variable two measured specialization throughout all levels of the organization. Variable three was administrative vertical span of control, from the principal to the superintendent. Variable four measured the general vertical span of control throughout the entire organization. Variable five was the lateral span of control-immediate. This was the mean value of the ratios of teachers to administrators found in each school of a district. Variable six was the lateral span of control--system wide. This was the ratio of building administrators in the district to the number of teachers in the district.

Variable seven was the number of central office clerks to administrative personnel. Variable eight was the total number of clerks to the total number of personnel. Variable nine compared the number of provisionally certified personnel in the district to the number of certified personnel. Variable ten was the utilization of technically qualified personnel. Variable eleven was the total size of the teaching staff. Variable twelve was total number of all employees. Variable thirteen was the total number of students. Variables one and two measured the specialization dimension. Variables three, four, five and six comprised the hierarchy of authority dimension. Variables seven and eight measure the characteristics of rules and regulations. Variables nine and ten constituted technical qualifications measure. Variables eleven, twelve, and thirteen were differing types of size.

## Data Source

A random sample of 297 teachers in nine school districts comprised the sample for this investigation and completed the EWCS.

Information obtained from superintendents, personnel directors, and official records of the nine school districts was used to calculate the degree of bureaucracy for each district. The data were analyzed by using one-way ANOVA. Six ANOVA tests were conducted by using the EWCS scores across (a) overall bureaucracy, (b) hierarchy of authority, (c) rules and regulations, (d) technical qualifications, (e) size, and (f) specialization. The division of this sample into various groups was undertaken to determine the relationships between the six motivational characteristics of the EWCS and the bureaucratic variables defined by Meyers (1972).

## Results

The hypothesis, with the exception of one instance of hypothesis reversal, was not supported. No significant differences were found to exist across the extrinsic, intrinsic, and risk propensity attitudes when grouped by the degree of bureaucracy existing in the nine districts. In the one instance of hypothesis reversal, teachers from districts low on the bureaucratic characteristic of size scored lower on an EWCS factor measuring intrinsic and risk propensity motivation. The detailed results of the six single classification analysis of variance procedures follow.

### Overall Bureaucracy

The first grouping was formed in an attempt to determine the overall bureaucracy of school districts and its relationship with the motivational characteristics of employees in those districts. Group I, the most bureaucratic (districts scoring lowest on the matrix of bureaucratic structure), consisted of A, C, and B. Group III, the least bureaucratic (those districts scoring highest on the matrix of bureaucratic structure), consisted of E, H, and I. Group II consisted of the remaining districts, F, D, and G. For each motivational characteristic in the EWCS an analysis of variance was conducted by using the above-defined groups.

In accord with the hypothesis, a summary of the analysis of variance for the three groups with overall bureaucracy on the EWCS factors is presented in Table 1. An F ratio of 2.99 was necessary for significance beyond the .05 level. None of the F ratios presented in Table 1 reach this level of significance.

TABLE 1

ANALYSIS OF VARIANCE FOR EMCS FACTORS ACROSS THREE GROUPS OF SCHOOL DISTRICTS DIFFERING IN OVERALL BUREAUCRACY LEVELS

| EMCS Factors | Means | | | F |
|---|---|---|---|---|
| | Group I | Group II | Group III | |
| PPCD | 25.14 | 25.12 | 24.73 | .69 |
| CDRS | 19.57 | 19.33 | 19.20 | .66 |
| TMP | 19.09 | 18.89 | 19.52 | .92 |
| CS | 18.46 | 17.97 | 19.07 | 2.09 |
| WSR | 13.80 | 14.24 | 14.05 | .37 |
| SC | 24.30 | 23.76 | 23.35 | 1.08 |

Specialization

By the use of the above-mentioned method for grouping, the bureaucratic characteristic of specialization for each school district was determined from a matrix of bureaucratic structure and is the basis in forming the groups used in the following analysis. Group I consisted of the most specialized: A, C, and B. Group III consisted of the least specialized: G, E, and I. Group II consisted of the remaining three districts: F, D, and H.

In accord with the hypothesis, a summary of the analysis of variance for the three groups with specialization on the EMCS factors is presented in Table 2. An F ratio of 2.99 is necessary for significance beyond the .05 level. None of the F ratios presented in Table 2 reach this level of significance.

TABLE 2

ANALYSIS OF VARIANCE FOR EMCS FACTORS ACROSS THREE GROUPS OF SCHOOL DISTRICTS DIFFERING IN SPECIALIZATION LEVELS

| EMCS Factors | Means | | | F |
|---|---|---|---|---|
| | Group I | Group II | Group III | |
| PPCD | 25.14 | 24.62 | 25.23 | 1.43 |
| CDRS | 19.58 | 19.82 | 19.21 | .62 |
| TUP | 19.09 | 18.83 | 18.58 | .71 |
| CS | 19.46 | 18.30 | 18.74 | .41 |
| USR | 13.80 | 14.32 | 13.97 | .53 |
| SC | 24.30 | 23.57 | 24.04 | 1.73 |

Hierarchy of Authority

The bureaucratic characteristic of hierarchy for each school district was determined from the matrix of bureaucratic structure and was the basis of forming the groups used in the following analysis. Group I consisted of the most hierarchical. Group I was A, F, and C. Group III consisted of the least hierarchical: C, B, and D. Group II consisted of the three remaining districts: E, H, and I.

In accord with the hypothesis, a summary of the analysis of variance for the three groups with hierarchy of authority on the EMCS factors is presented in Table 3. An F ratio of 2.99 is necessary for significance beyond the .05 level. None of the F ratios presented in Table 3 reach this level of significance.

TABLE 3

ANALYSIS OF VARIANCE FOR EMCS FACTORS ACROSS THREE GROUPS OF SCHOOL DISTRICTS DIFFERING IN HIERARCHY OF AUTHORITY LEVELS

| EMCS Factors | Means | | | F |
|---|---|---|---|---|
| | Group I | Group II | Group III | |
| PPCD | 25.16 | 25.10 | 24.74 | .70 |
| CDRS | 19.83 | 19.58 | 19.20 | .66 |
| TMP | 18.83 | 19.10 | 18.52 | .94 |
| CS | 18.20 | 18.23 | 19.07 | 2.31 |
| MSR | 14.10 | 13.94 | 14.05 | .05 |
| SC | 23.95 | 24.11 | 23.85 | .05 |

Rules and Regulations

The bureaucratic characteristic of rules and regulations for each school district was determined from the matrix of bureaucratic structure and is the basis of forming the groups used in the following analysis. Group I consisted of the school districts having the most rules and regulations: C, E, and I. Group III consisted of the districts having the fewest rules and regulations: B, H, and G. Group II consisted of the three remaining districts: A, D, and F.

In accord with the hypothesis, a summary of the analysis of variance for the three groups with rules and regulations on the EMCS factors is presented in Table 4. An F ratio of 2.99 is necessary for significance at the .05 level. None of the F ratios presented in Table 4 reach this level of significance.

TABLE 4

ANALYSIS OF VARIANCE FOR EWCS FACTORS ACROSS THREE GROUPS OF SCHOOL DISTRICTS DIFFERING IN RULES AND REGULATIONS LEVELS

| EWCS Factors | Means | | | F |
|---|---|---|---|---|
| | Group I | Group II | Group III | |
| PPCD | 24.96 | 25.08 | 24.96 | .06 |
| CDRS | 18.90 | 20.01 | 19.70 | 2.22 |
| TWP | 18.80 | 19.17 | 18.53 | 1.35 |
| CS | 18.88 | 18.13 | 18.49 | 1.32 |
| WSR | 13.82 | 14.33 | 13.94 | .53 |
| SC | 24.07 | 23.90 | 23.93 | .10 |

Technical Qualifications

The bureaucratic characteristic of technical qualifications for each school district was determined from the matrix of bureaucratic structure and was the basis of forming groups used in the following analysis. Group I consisted of the districts most technically qualified: A, G, and H. Group III consisted of the districts least technically qualified: B, F, and E. Group II consisted of the remaining three districts: C, D, and I.

In accord with the hypothesis, a summary of the analysis of variance for the three groups with technical qualifications on the EWCS factors is presented in Table 6. An F ratio of 2.99 is necessary for significance at the .05 level. None of the F ratios presented in Table 5 reach this level of significance.

TABLE 5

ANALYSIS OF VARIANCE FOR EWCS FACTORS ACROSS THREE GROUPS OF SCHOOL DISTRICTS DIFFERING IN TECHNICAL QUALIFICATIONS LEVELS

| EWCS Factors | Means | | | F |
|---|---|---|---|---|
| | Group I | Group II | Group III | |
| PPCD | 25.91 | 25.07 | 24.74 | .74 |
| CDRS | 19.66 | 19.16 | 19.79 | .73 |
| TWP | 18.70 | 18.70 | 19.09 | .54 |
| CS | 18.37 | 18.80 | 18.32 | .67 |
| WSR | 14.14 | 13.64 | 14.31 | .91 |
| SC | 23.84 | 24.08 | 23.99 | 1.89 |

Size

The bureaucratic characteristic of size for each school district was determined from the matrix of bureaucratic structure and is the basis of forming the groups used in the following analysis. Group I consisted of the largest districts: A, B, and C. Group III consisted of the smallest districts: G, H, and I. Group II consisted of the three remaining districts: E, F, and D.

In accord with the hypothesis a summary of the analysis of variance for the three groups with size on the EWCS factors is presented in Table 6. An F ratio of 2.99 is necessary for significance beyond the .05 level. With the exception of tolerance for work pressure, none of the F ratios presented in Table 6 reach this level of significance. The EWCS factor tolerance for work pressure has an F ratio of 4.27, which is significant beyond the .05 level.

TABLE 6

ANALYSIS OF VARIANCE FOR EWCS FACTORS ACROSS THREE GROUPS OF SCHOOL DISTRICTS DIFFERING IN SIZE LEVELS

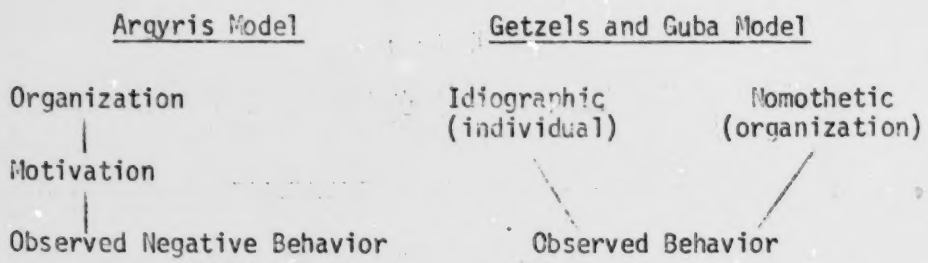
| EWCS Factors | Means | | | F |
|---|---|---|---|---|
| | Group I | Group II | Group III | |
| PPCD | 25.14 | 24.93 | 24.93 | .20 |
| CDRS | 19.58 | 19.75 | 19.78 | .37 |
| TWP | 19.09 | 19.28 | 18.12 | 4.27* |
| CS | 18.46 | 17.96 | 19.08 | 2.90 |
| WSR | 13.80 | 14.66 | 13.64 | 2.24 |
| SC | 24.30 | 23.70 | 23.90 | 1.17 |

*Significant beyond the .05 level.

The Tukey (a) procedure Winer (1962) was employed as a method to post hoc analysis in an effort to identify the differences found above. The mean for Group III was statistically different from the means of Groups I and II.

## Scientific Importance

As stated earlier, this study was prompted by the works of Argyris (1973) and Getzels and Guba (1957). As shown in the model below, Argyris maintains that the organization affects the worker motivation and causes a negative observed behavior. The Getzels and Guba model shows the two dimensions of the social system as being separate and independent dimensions interacting to affect the observed behavior of the individual in the organization.




The findings of this study do not support the position of Argyris; in fact, the only significant findings contradict that position. Organizational structure seems to have little or no relationship to motivation.

The results of this study seem to support the Getzels and Guba position that the two dimensions of the social system or organization, the nomothetic dimension and the idiographic dimension, are separate, independent dimensions. The findings do not necessarily support the position that the interaction of the two dimensions causes the observed behavior of the individual since there was no measure of behavior in the present investigation. Future research will be needed to investigate the existence of the interaction by the two dimensions. This study suggests that future research in the area of organizational structure and work motivation focus on the position proposed by Getzels and Guba; that is, the social system is made up of the roles of the organization as one dimension and the needs of the individual as another dimension with the observed behavior being the criterion.

## References

Adams, R.S., Kimble, R.M. & Marlin, M. School size, organizational structure, and teaching practices, Educational Administration Quarterly, 1970, 6, 15-29.

Argyris, C. Personality and organization theory revisited. Administrative Science Quarterly, 1973, 18(2), 141-166.

Blau, P.M. & Scott, R. Formal organizations. San Francisco: Chandler, 1962.

Borgatta, E.F. The work components study: A set of measures for work motivation. Journal of Psychological Studies, 1967, 16, 1-11.

Borgatta, E.F., Ford, R.N. & Bohrnstedt, G.W. The work components study: A revised set of measures for work motivation. Multivariate Behavioral Research, 1968, 3, 403-414.

Bridges, E.M. Bureaucratic role and socialization: The influence of experience on the elementary principal. Educational Administration Quarterly, 1965, 2, 18-28.

Carpenter, H.H. Formal organizational structure factors and perceived job satisfaction of classroom teachers. Administrative Science Quarterly, 1971, 16, 460-465.

Coughlan, R.J. Job satisfaction in relatively closed and open schools. Educational Administration Quarterly, 1971, 7, 40-59.

George, J.R. & Bishop, L.R. Relationship of organizational structure and teacher personality characteristics to organizational climate, Administrative Science Quarterly, 1971, 16, 467-475.

Getzels, J.W. & Guba, E.G. Social behavior and the administrative process. School Review, 1957, 65, 423-441.

Hoy, W.K. & Williams, L.B. Loyalty to immediate superior at alternate levels in public schools, Educational Administration Quarterly, 1971, 7, 1-11.

Meyers, R.W. The relationship of bureaucratization of selected structural characteristics of school systems and teachers' sense of power. Ph.D. dissertation, University of Chicago, 1972.

Miskel, C. The motivation of educators to work. Educational Administration Quarterly, 1973, 9, 42-53.

Miskel C.G. & Heller, L.E. The educational work components study: An adapted set of measures for work motivation. Journal of Experimental Education, 1973, 42, 45-50.

Moeller, G.H. & Charters, W.W. Relation of bureaucratization to sense of power among teachers. Administrative Science Quarterly, 1966, 10, 444-465.

O'detola, T.O., Erickson, E.L., Bryan, C.E., & Walker, L. Organizational structure and student alienation. Educational Administration Quarterly, 1972, 8, 15-26.

Summers, G.F., Burke, M., Saltiel, S. & Clark, J. Stability of the work components study among high school students. Multivariate Behavioral Research, 1971, 6, 35-50.

Winer, B.J. Statistical principles in experimental design. New York: McGraw-Hill Book Company, 1971.